


IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered). Please AMEND claims, and ADD new claims, in accordance with the following:

 1. (ORIGINAL) An authentication apparatus comprising:
measuring means for measuring biometric information of an individual;
converting means for carrying out a predetermined conversion process with respect to the biometric information so as to obtain converted biometric information;
extracting means for extracting feature information from the converted biometric information so as to obtain extracted feature information; and
verifying means for verifying the extracted feature information with respect to registered information which is registered in advance, so as to authenticate the individual.

2. (CURRENTLY AMENDED) The authentication apparatus as claimed in claim 4 2, which further comprises:
input means for inputting parameters used by said converting means for the predetermined conversion process.

3. (CURRENTLY AMENDED) The authentication apparatus as claimed in claim 4 2, wherein said converting means uses personal information related to the individual as the parameters.

4. (CURRENTLY AMENDED) The authentication apparatus as claimed in claim 4 2, wherein said verifying means receives the registered information by a communication which is made via a medium, and said converting means uses an enciphering key which is used for the communication as the parameters used for the predetermined conversion process.

5. (ORIGINAL) The authentication apparatus as claimed in claim 1, wherein the

registered information is prestored in a recording medium, and said verifying means reads the registered information from the recording medium.

6. (ORIGINAL) The authentication apparatus as claimed in claim 5, wherein said measuring means, said converting means, said extracting means and said verifying means are provided in a client computer, and said recording medium is read in the client computer.

7. (ORIGINAL) The authentication apparatus as claimed in claim 5, wherein said measuring means, said converting means, said extracting means and said verifying means are provided in a client computer, and said recording medium is read in a server computer which is coupled to the client computer via a network and the registered information read from the recording medium is supplied to said verifying means in the client computer via the network.

8. (ORIGINAL) The authentication apparatus as claimed in claim 5, wherein said measuring means, said converting means and said extracting means are provided in a client computer, said verifying means is provided in a server computer which is coupled to the client computer via a network, and said recording medium is read in the server computer.

9. (ORIGINAL) An authentication apparatus comprising:
measuring means for measuring biometric information of an individual;
extracting means for extracting feature information from the biometric information so as to obtain extracted feature information;
converting means for carrying out a predetermined conversion process with respect to the extracted feature information so as to obtain converted extracted feature information; and
verifying means for verifying the converted extracted feature information with respect to registered information which is registered in advance, so as to authenticate the individual.

10. (ORIGINAL) The authentication apparatus as claimed in claim 9, which further comprises:
input means for inputting parameters used by said converting means for the predetermined conversion process.

11. (CURRENTLY AMENDED) The authentication apparatus as claimed in claim 9 10, wherein said converting means uses personal information related to the individual as the parameters.

12. (CURRENTLY AMENDED) The authentication apparatus as claimed in claim 9 10, wherein said verifying means receives the registered information by a communication which is made via a medium, and said converting means uses an enciphering key which is used for the communication as the parameters used for the predetermined conversion process.

13. (ORIGINAL) The authentication apparatus as claimed in claim 9, wherein the registered information is prestored in a recording medium, and said verifying means reads the registered information from the recording medium.

14. (ORIGINAL) The authentication apparatus as claimed in claim 13, wherein said measuring means, said extracting means, said converting means and said verifying means are provided in a client computer, and said recording medium is read in the client computer.

15. (ORIGINAL) The authentication apparatus as claimed in claim 13, wherein said measuring means, said extracting means, said converting means and said verifying means are provided in a client computer, and said recording medium is read in a server computer which is coupled to the client computer via a network and the registered information read from the recording medium is supplied to said verifying means in the client computer via the network.

16. (ORIGINAL) The authentication apparatus as claimed in claim 13, wherein said measuring means, said extracting means and said converting means are provided in a client computer, said verifying means is provided in a server computer which is coupled to the client computer via a network, and said recording medium is read in the server computer.

17. (CURRENTLY AMENDED) An authentication apparatus for authenticating an individual by verifying input biometric information with respect to registered biometric information, comprising:

measuring means for measuring biometric information of the individual;

converting means for carrying out a predetermined conversion process, selected from a

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group consisting of expansion, compression, rotation, deformation, affine transformation, morphing, coordinate transformation, function process, parameter conversion, frequency conversion, time base conversion, and rearrangement of bit sequences, with respect to the measured biometric information so as to obtain converted biometric information; and
registering means for registering ~~the~~ converted biometric information in advance; and
verifying means for verifying the converted biometric information obtained by said
converting means with respect to the converted biometric information registered in said
registering means, so as to authenticate the individual.

18. (ORIGINAL) An authentication apparatus comprising:
measuring means for measuring biometric information of an individual;
converting means for carrying out a predetermined conversion process with respect to the biometric information so as to obtain converted biometric information;
registering means for registering converted biometric information in advance; and
verifying means for verifying the converted biometric information obtained by said
converting means with respect to the converted biometric information registered in said
registering means, so as to authenticate the individual.

19. (ORIGINAL) A computer-readable storage medium which stores a program for causing a computer to authenticate an individual, comprising:
measuring means for causing the computer to measure biometric information of an individual;
converting means for causing the computer to carry out a predetermined conversion process with respect to the biometric information so as to obtain converted biometric information;
extracting means for causing the computer to extract feature information from the converted biometric information so as to obtain extracted feature information; and
verifying means for causing the computer to verify the extracted feature information with respect to registered information which is registered in advance, so as to authenticate the individual.

20. (ORIGINAL) The computer-readable storage medium as claimed in claim 19, which further comprises:

input means for causing the computer to input parameters used by said converting means for the predetermined conversion process.

21. (ORIGINAL) The computer-readable storage medium as claimed in claim 19, wherein said verifying means causes the computer to read the registered information from a recording medium which prestores the registered information.

22. (ORIGINAL) A computer-readable storage medium which stores a program for causing a computer to authenticate an individual, comprising:

measuring means for causing the computer to measure biometric information of an individual;

extracting means for causing the computer to extract feature information from the biometric information so as to obtain extracted feature information;

converting means for causing the computer to carry out a predetermined conversion process with respect to the extracted feature information so as to obtain converted extracted feature information; and

verifying means for causing the computer to verify the converted extracted feature information with respect to registered information which is registered in advance, so as to authenticate the individual.

23. (ORIGINAL) The computer-readable storage medium as claimed in claim 22, which further comprises:

input means for causing the computer to input parameters used by said converting means for the predetermined conversion process.

24. (ORIGINAL) The computer-readable storage medium as claimed in claim 22, wherein said verifying means causes the computer to read the registered information from a recording medium which prestores the registered information.

25. (CURRENTLY AMENDED) A computer-readable storage medium which stores a program for causing a computer to authenticate an individual by verifying input biometric information with respect to registered biometric information, comprising:

measuring means for causing the computer to measure biometric information of the

individual;

converting means for causing the computer to carry out a predetermined conversion process, selected from a group consisting of expansion, compression, rotation, deformation, affine transformation, morphing, coordinate transformation, function process, parameter conversion, frequency conversion, time base conversion, and rearrangement of bit sequences, with respect to the biometric information so as to obtain converted biometric information; and

registering means for causing the computer to register the converted biometric information in advance; and

verifying means for causing the computer to verify the converted biometric information obtained by said converting means with respect to the converted biometric information registered by said registering means, so as to authenticate the individual.

26. (ORIGINAL) A computer-readable storage medium which stores a program for causing a computer to authenticate an individual, comprising:

measuring means for causing the computer to measure biometric information of an individual;

converting means for causing the computer to carry out a predetermined conversion process with respect to the biometric information so as to obtain converted biometric information;

registering means for causing the computer to register converted biometric information in advance; and

verifying means for causing the computer to verify the converted biometric information obtained by said converting means with respect to the converted biometric information registered in said registering means, so as to authenticate the individual.

27. (PREVIOUSLY ADDED) An authentication apparatus, comprising:

a measuring unit measuring biometric information of an individual;

a converter converting the biometric information and outputting converted biometric information;

an extractor extracting feature information from the converted biometric information and outputting extracted feature information; and

a verifier comparing the extracted, converted feature information with registered, corresponding information of the individual, which is registered in advance, to authenticate the

individual.

28. (PREVIOUSLY ADDED) An authentication apparatus comprising:
a measuring unit measuring biometric information of an individual;
an extractor extracting feature information from the biometric information and outputting extracted feature information;
a converter converting the extracted feature information and outputting converted and extracted feature information; and
a verifier comparing the converted, extracted feature information with registered, corresponding information of the individual, which is registered in advance, to authenticate the individual.

29. (PREVIOUSLY ADDED) A computer-readable memory medium which stores a program for causing a computer to authenticate an individual, by:
measuring biometric information of an individual;
converting the measured biometric information to produce converted biometric information;
extracting the converted biometric information to produce extracted, converted feature information; and
comparing the extracted, converted feature information with registered, corresponding information of the individual, which is registered in advance, so as to authenticate the individual.

30. (PREVIOUSLY ADDED) A computer-readable memory medium which stores a program for causing a computer to authenticate an individual, by:
measuring biometric information of an individual;
extracting feature information from the measured biometric information and producing extracted feature information;
converting the extracted feature information and producing converted extracted feature information; and
comparing the converted extracted feature information with registered, corresponding information of the individual, which is registered in advance, to authenticate the individual.

31. (NEW) An authentication method for authenticating an individual by verifying

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input biometric information with respect to registered biometric information, comprising:

measuring biometric information of the individual;

carrying out a predetermined conversion process with respect to the measured biometric information so as to obtain converted biometric information;

registering the converted biometric information in advance as registered, converted biometric information; and

verifying the converted biometric information obtained by the predetermined conversion process with respect to the registered, converted biometric information, so as to authenticate the individual.

32. (NEW) The authentication method as claimed in claim 31, wherein the predetermined conversion process is selected from a group consisting of expansion, compression rotation, deformation, affine transformation, morphing, coordinate transformation, function process, parameter conversion, frequency conversion, time base conversion, and rearrangement of bit sequences.

33. (NEW) The authentication method as claimed in claim 31, further comprising: inputting parameters used for the predetermined conversion process.
